

HIGH EXPLOSIVE
SHELLS
IN THE MAKING



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HIGH EXPLOSIVE SHELLS IN THE MAKING

A Souvenir Booklet

Issued by

The Maritime Manufacturing Corporation

Outlining Its Achievements

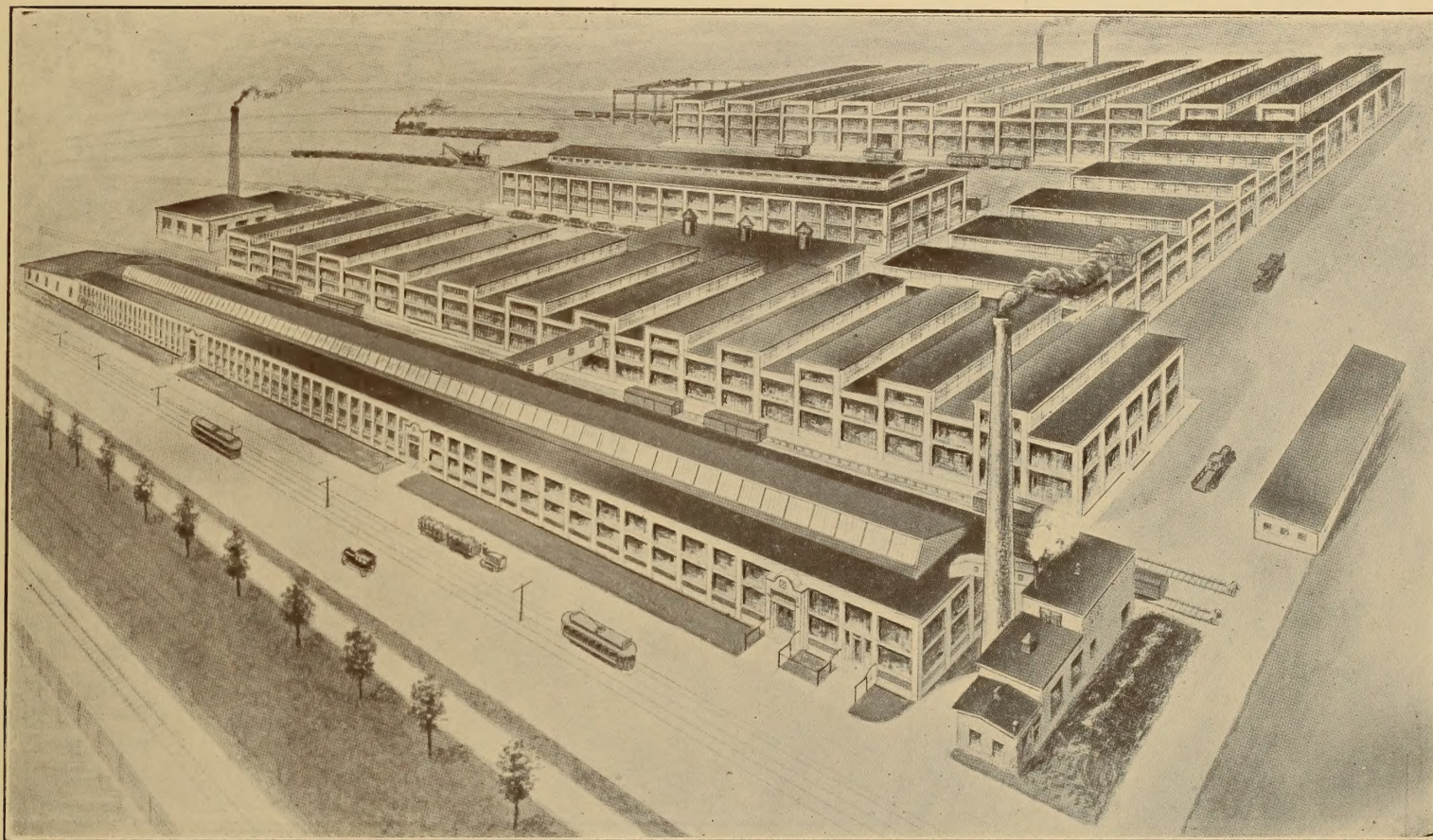
1918 - - - 1919



ST. JOHN, N. B.

CANADA

□ □

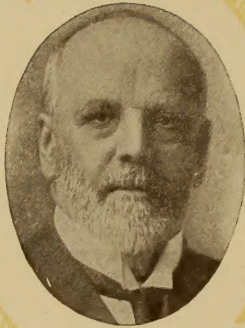


"Maritime" Plant at Rothesay Avenue, St. John, Canada

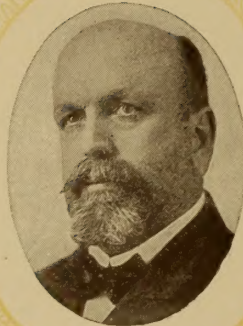
Directors



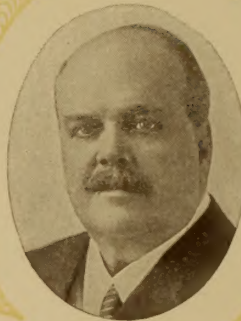
GEORGE McAVITY
President



THOMAS McAVITY
Director



JOHN A. McAVITY
Vice-President



STEPHEN S. McAVITY
Director



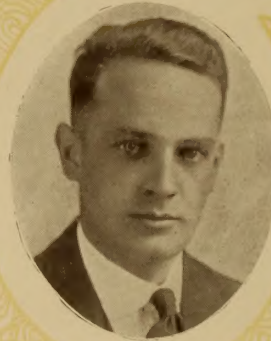
ALLAN G. McAVITY
Managing Director



T. McAVITY STEWART
Director and Washington Representative



JAMES L. McAVITY
Director



G. CLIFFORD McAVITY
Director



CHARLES COSTER
Secretary and Treasurer

Maritime Manufacturing Corporation

Board of Directors

GEORGE McAVITY, *President*

JOHN A. McAVITY, *Vice-President*

ALLAN G. McAVITY, *Managing Director*

THOMAS McAVITY

STEPHEN S. McAVITY

JAS. L. McAVITY

G. CLIFFORD McAVITY

T. McAVITY STEWART

T. McAVITY STEWART,
Washington Representative

CHARLES COSTER,
Secretary and Treasurer

I N T R O D U C T I O N



ALTHOUGH the Maritime Manufacturing Corporation was only organized in the early months of 1918, it had, at the time the armistice was signed, attained an enviable position among munition manufacturers in America. At the time of the armistice it was operating the largest 9.2" shell machining plant in America.

¶ This plant covers ten acres and employed about 2,500 hands; the capacity of the plant had not been fully developed when the work was stopped, but it is safe to say that the output would have exceeded 2,500 finished 9.2" shells per day.

¶ This corporation realized the importance of maintaining the schedule of deliveries as laid down by the U. S. government, and no expense was spared in equipping the plant to attain this end. Orders were received on March 15 which called for deliveries beginning in September. The production department of the Bureau of Ordnance was particularly anxious to secure early delivery of this calibre shell, as cables had been received from General Pershing urging the earliest possible delivery. It is, therefore, particularly gratifying to record the fact that deliveries were started three months in advance of the promised schedule and that at the time of the armistice 25,000 more shells had been shipped than contracts specified.

¶ The United States government had purchased 9.2" guns from the British government, and shells of this calibre were put to immediate use on arrival in France and it was a great satisfaction to the corporation, and to all its employees to know that the shells which they produced were used by General Pershing's artillery in the World War.

¶ Early in the month of February, 1918, the United States government required immediately 240 milimetre proof shells to test out the guns which were then being made. To ensure prompt delivery this order was divided equally among four concerns. Although the Maritime Manufacturing Corporation had to install extra equipment and make new tools throughout, the shells manufactured at the Maritime plant were finished in June, this order being the first of the four to be completed. ✥ ✥ ✥ ✥ ✥ ✥ ✥

¶ A separate plant employing about 350 hands was devoted to the manufacture of 4.7" shells. Owing to changes in design and delay in receipt of components, this plant did not have an opportunity to prove its capacity. It was equipped to produce 1,000 shells per day and at the time of the armistice deliveries had been made in excess of contract schedule.

¶ The success of the Maritime Manufacturing Corporation was due to the *esprit de corps* and enthusiasm of its employees. The home of practically every employee had been saddened by records of casualties with the forces overseas and the fighting spirit of those who remained behind was reflected in the output of shells from these plants. Every man and woman employed in shell production at the Maritime plants could be counted upon to work Sundays and holidays when required. ✥ ✥ ✥ ✥ ✥ ✥ ✥





Showing over 200,000 Rough 9.2" Forgings (weight 370 lbs. each) in the 9.2" Shell Plant Yard, waiting to be Machined.
The total length of above forgings in yard, if laid end to end, would make a solid steel line over one hundred miles in length



9.2" H.E.
Shell

Showing
Forgings
leaving
Car on
Conveyor

9.2 Plant Officers and Staff



HUGH R. TAIT.....Supt. 9.2" Plant
F. L. MILLER.....Purchasing Agent
FRANK DUSTAN.....Chief Draughtsman
GROVER KEITH.....Chief Engineer on Construction
A. McCLOSKEY.....Chief Clerk

	No. 1 Shift 7 A.M. to 3 P.M.	No. 2 Shift 3 to 11 P.M.	No. 3 Shift 11 P.M. to 7 A.M.
	SMITH MOORE, <i>Asst. Supt.</i>	GEO. H. JOHNSTON, <i>Asst. Supt.</i>	H. G. EVANS, <i>Asst. Supt.</i>
<i>General Foreman No. 1 Shop.....</i>	WALTER WOODHEAD	JOHN L. ZANZINGER	H. TAYLOR
<i>General Foreman No. 2 Shop.....</i>	DUNCAN MCKAY		
<i>Foreman Shell Operations.....</i>	J. ALLISON	LESLIE BAIN	WM. DODGE
<i>Foreman Shell Operations.....</i>	ROY WADDELL	G. S. PORTE	
<i>Foreman Base Plug Operations.....</i>	CHAS. LAUZON	W. E. CUMMINGS	J. A. MCKINNON
<i>Foreman Rectification of Components.....</i>	JOS. TOTTEN		
<i>Foreman Receiving and Shipping Crews.....</i>	H. TICKNER		
<i>Charge Hand Unloading Components.....</i>	F. SWEENEY		
<i>Charge Hand Face Nose, Drill and Cut Off.....</i>	FLETCHER McDONALD	L. PORTER	F. GALLAGHER
<i>Charge Hand Rough Turn.....</i>	JAS. SCOTT	ERNEST CAMPBELL	GEO. JACKSON
<i>Charge Hand Rough Turn.....</i>	E. FITZGERALD		W. BEDFORD
<i>Charge Hand Rough Bore.....</i>	WM. THOMPSON	G. ATKINSON	PERRY DUPLISSIE
<i>Charge Hand Finish Bore.....</i>	A. LAMB	A. BELYEA	C. STEWART
<i>Charge Hand Finish Turn.....</i>	A. P. BATES	S. R. FACEY	JOHN MCFARLANE
<i>Charge Hand Wave Rib.....</i>	R. TOTTEN	R. WHEATON	J. WADDELL
<i>Charge Hand M.B.T., B.R.N., M.N.T.....</i>	D. MURPHY	R. E. WADDELL	G. CONNELL
<i>Charge Hand R. & F. T. Base Plugs.....</i>	J. MCHUGH	PETER BLANCHARD	J. RILEY
<i>Charge Hand M. T. Base Plugs.....</i>	G. DUFFLEY		
<i>Charge Hand Base Plug Fitting.....</i>	F. CARTER		

9.2 Plant

Officers and Staff—*Continued*

D. W. ROBB, JR., *Chief Inspector*

	No. 1 Shift	No. 2 Shift	No. 3 Shift
<i>Head Inspector</i>	H. McKEE	R. McDONALD	H. SHORTCLIFFE
<i>Assistant Head Inspector</i>	GEO. LAWLOR	H. FULTON	E. WILSON
<i>Heat Tracing and Shell Moving</i>	A. G. HILLSON	W. L. DAYE	F. SINCLAIR

J. CRAWFORD SMITH, *Asst. Supt. Tools and Equipment*

	No. 1 Shift	No. 2 Shift
	7 A.M. to 6 P.M.	6 P.M. to 7 A.M.
<i>Foreman Tool Department</i>	WALTER POWERS	DANE CROSBY
<i>Foreman Machine Repairs</i>	DANIEL THOMPSON	WM. MCKAY
<i>Foreman Millwright</i>	HARRY SCOVIL	EDWARD ROBICHAUD
<i>Foreman Electrician</i>	WARREN VAUGHAN	WM. TRIFTS
<i>Chief Engineer Power Plants</i>	JOHN E. B. HERD	

MISS BESSIE DAWSON, *Supervisor of Women Employees*

	No. 1 Shift	No. 2 Shift	No. 3 Shift
<i>Assistant Supervisor</i>	MISS A. M. MCKIM	MRS. J. MOSS	MISS J. SANDALL

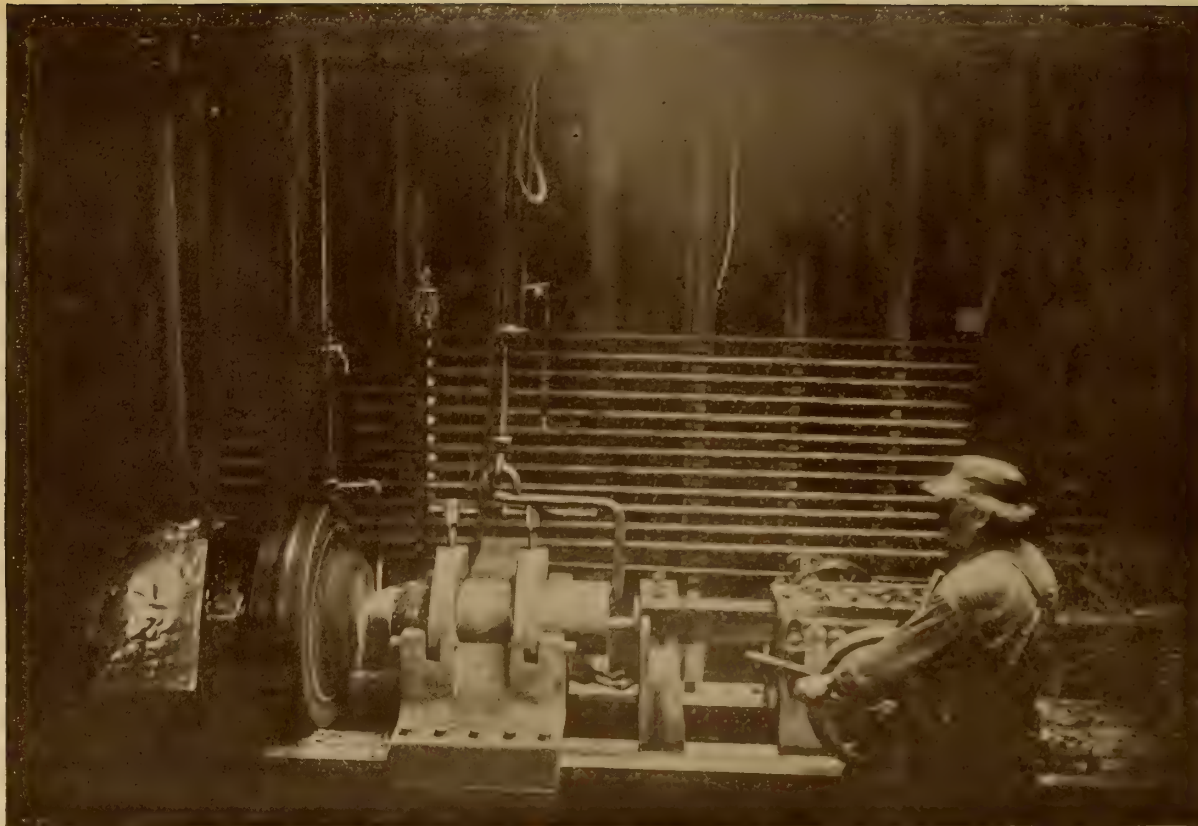
STEEL FOUNDRY

THOS. E. DAY, *Engineer*

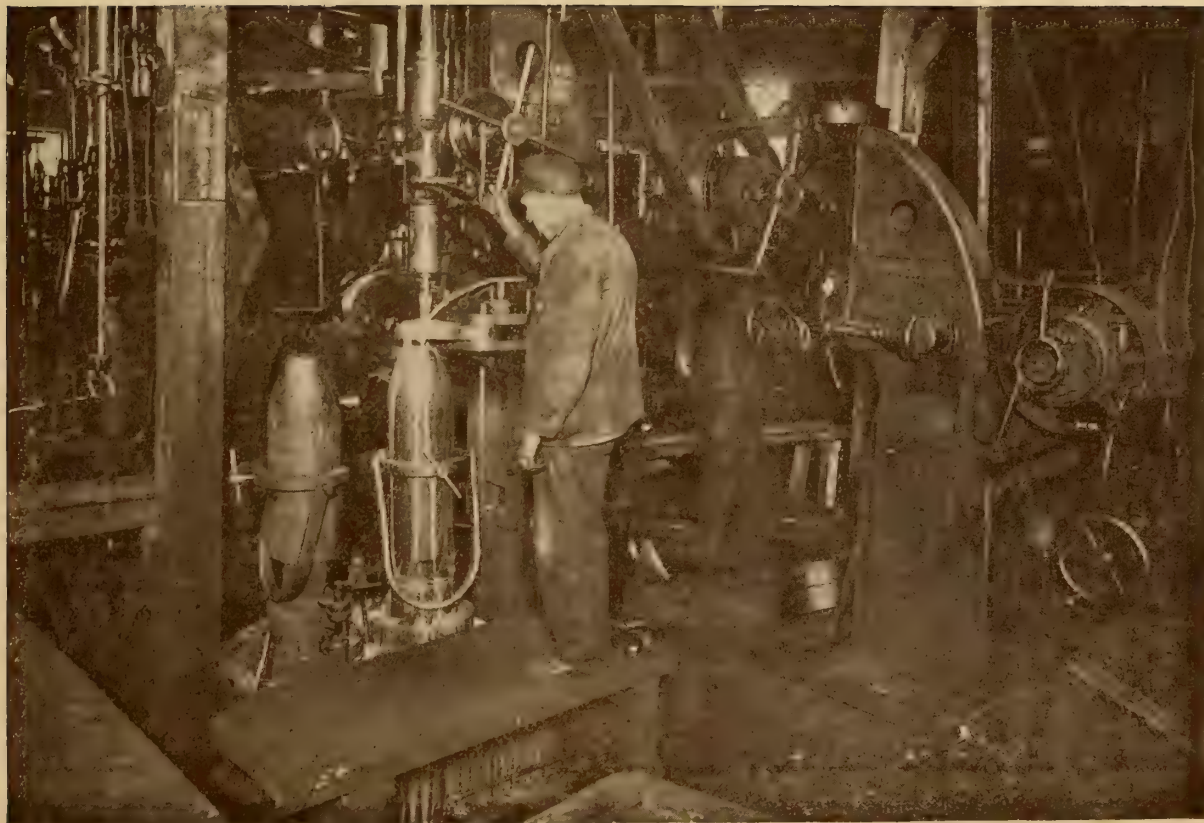
RICHARD MORRIS, *Foreman*

<i>Cafeteria</i>	MRS. A. L. PRICE	MISS ROSAMOND McAVITY	MISS GLADYS DOWLING
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9.2" H. E
Shell



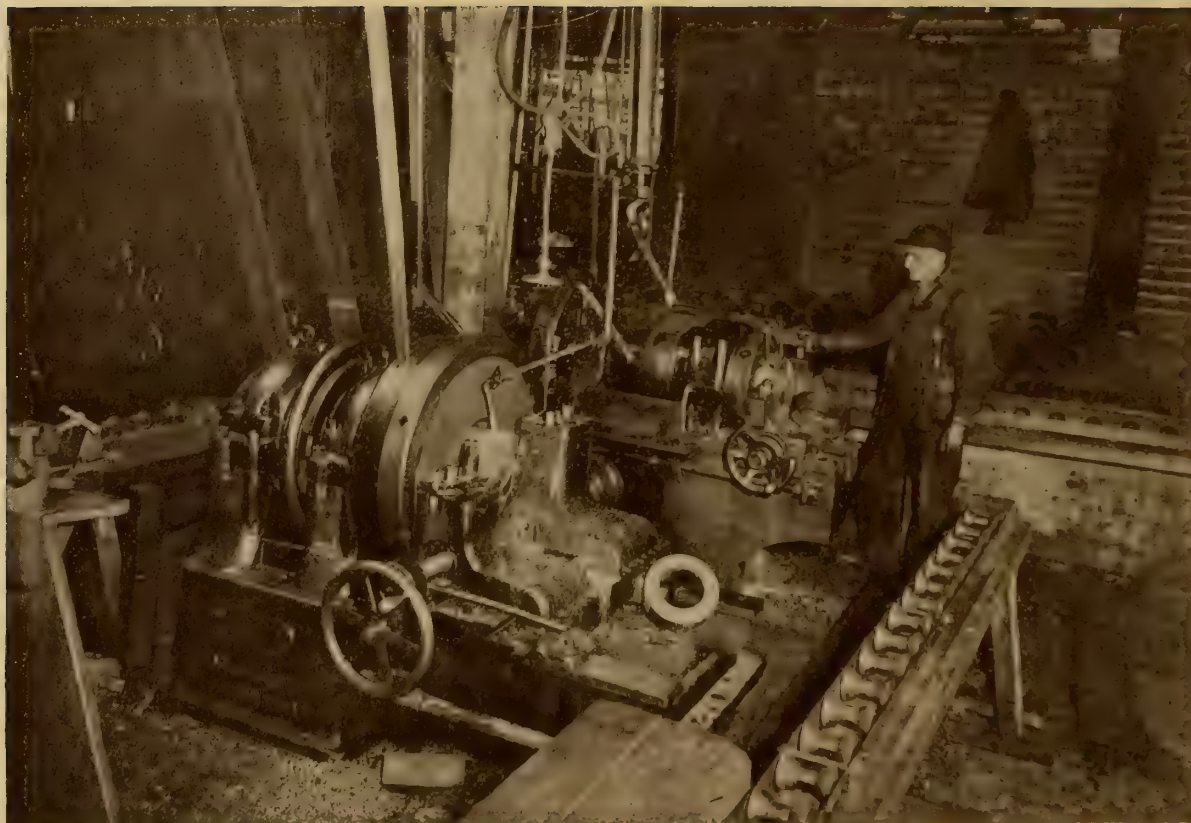
Operation
No. 1
Rough
Face
Nose



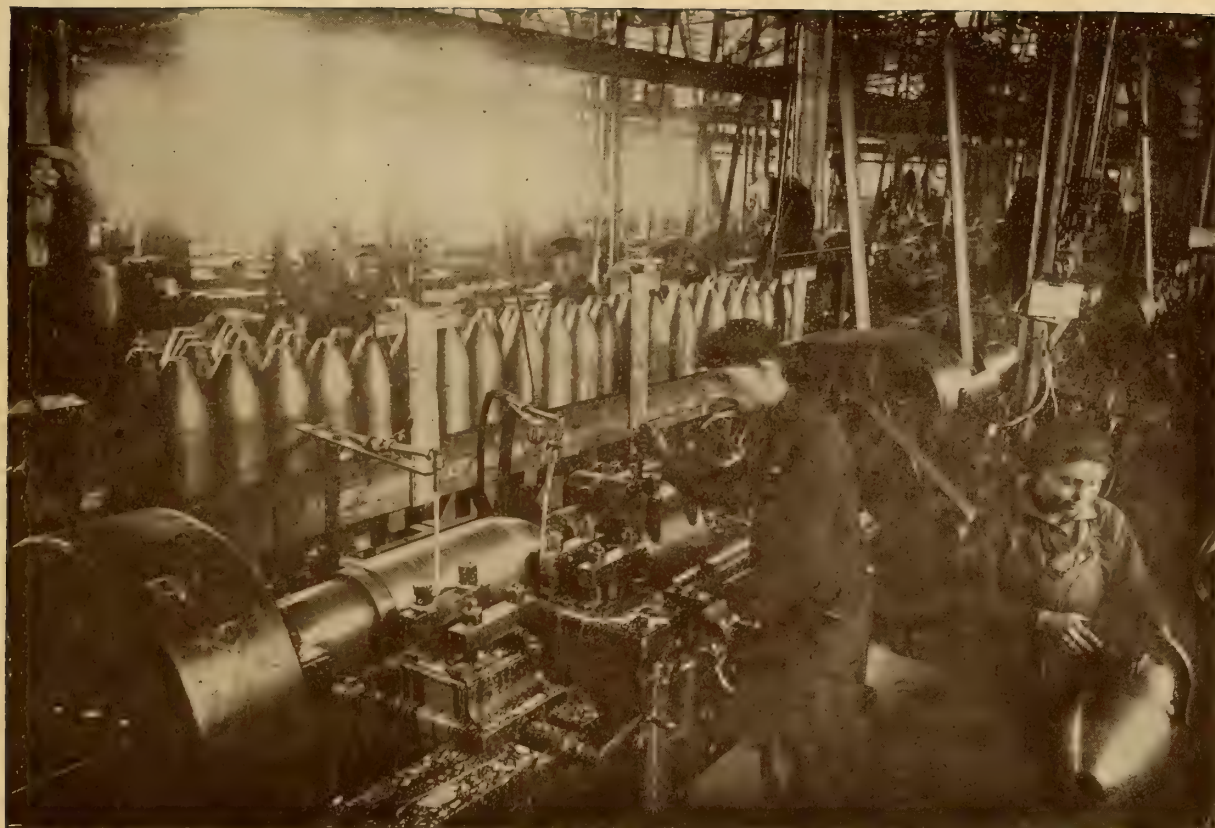
9.2' H.E.
Shell

Operation
No. 2
Drill
Nose

9.2" H.E.
(Shell)



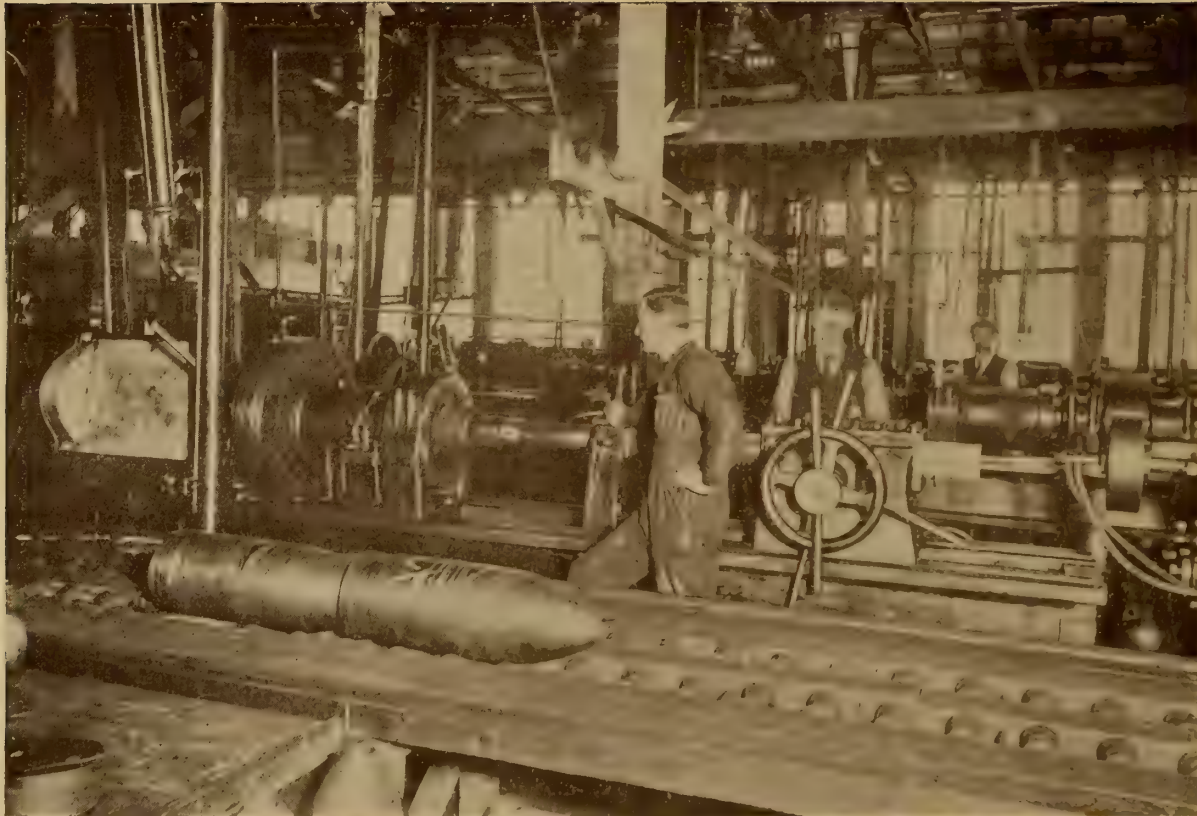
Operation
No. 3
Cut off
Open End



9.2" H.E.
Shell

Operation
No. 4
Rough
Turn
Body

9.2" H.E.
Shell



Operation
No. 5
Rough
Form
Inside
Profile



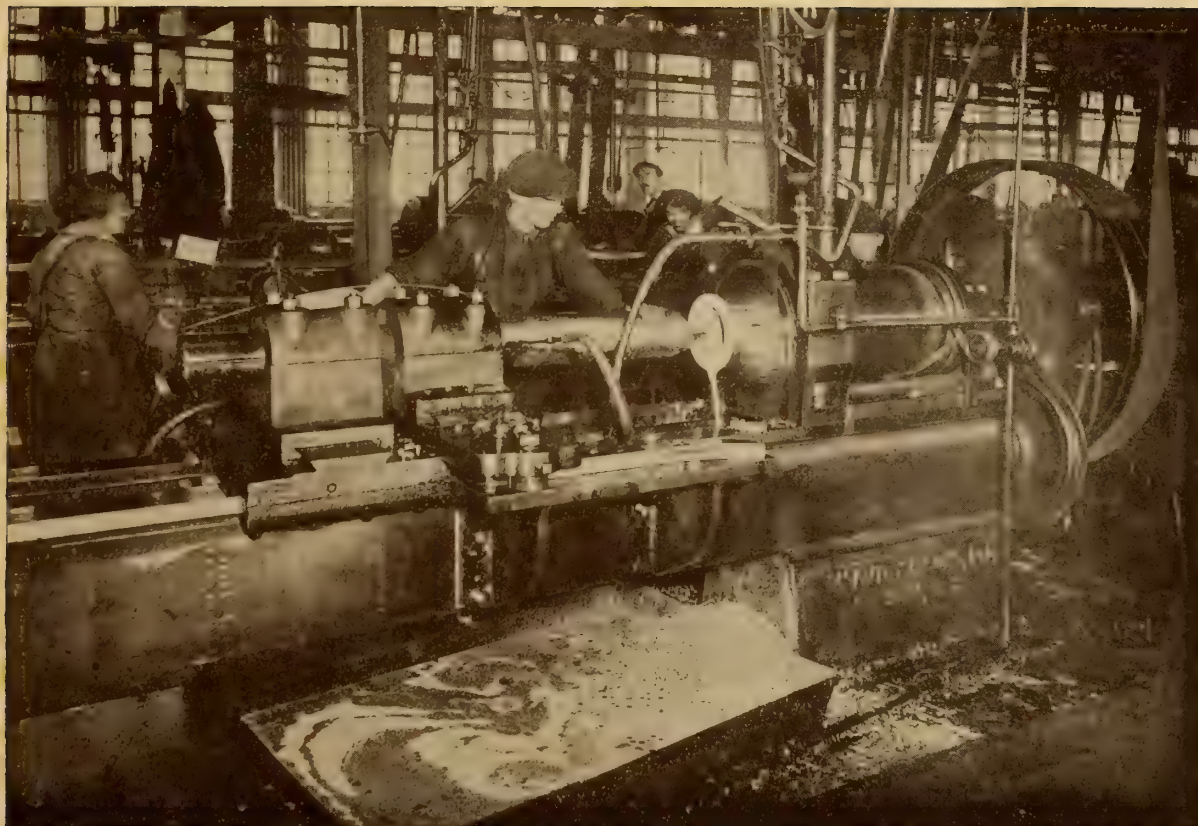
9.2" H.E.
Shell

General
View
Rough
Turn
Section

9.2" H.E.
Shell



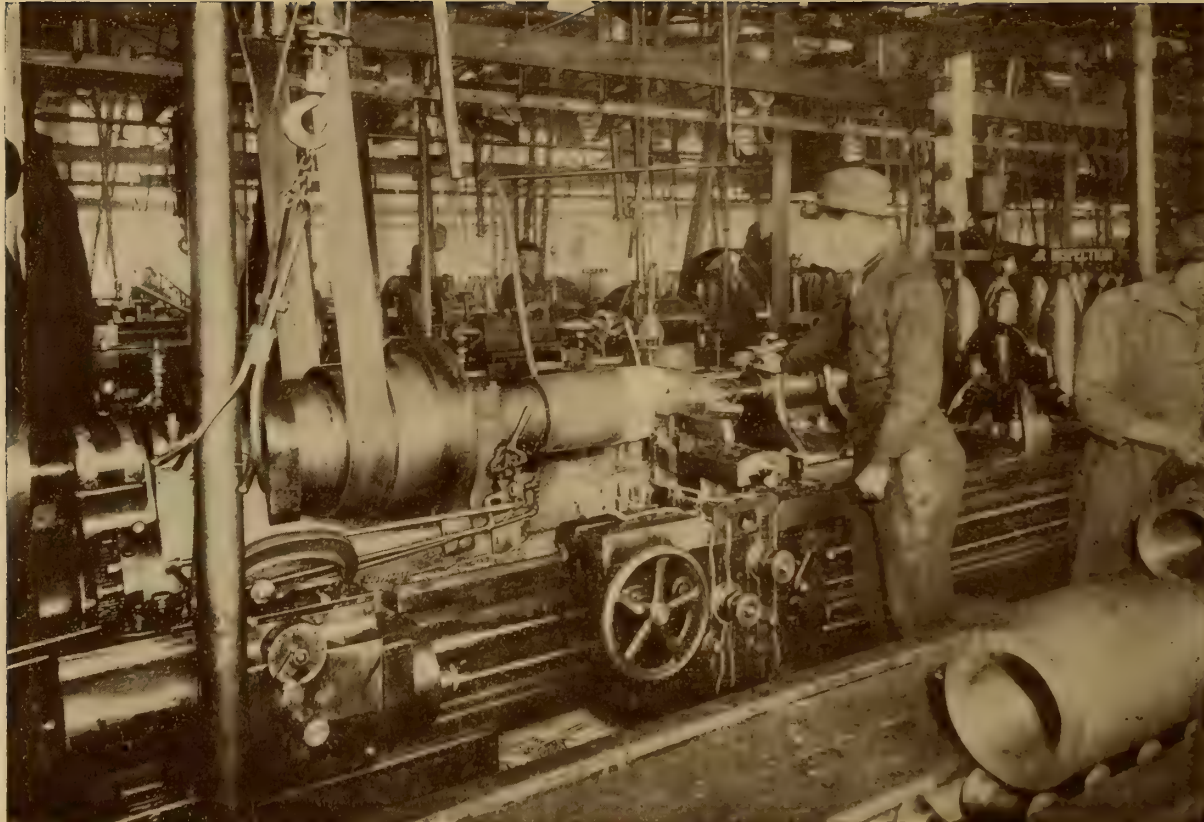
General
View
Boring
Section



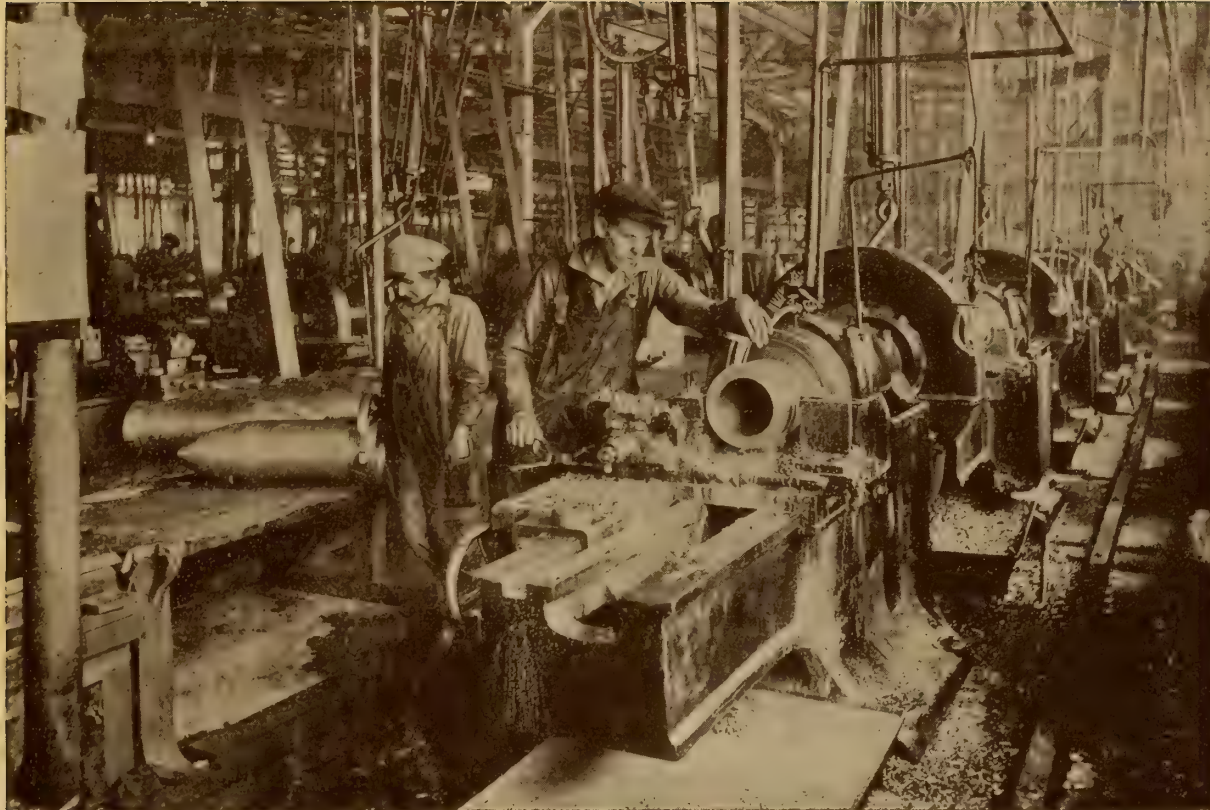
9.2" H.E
Shell

Operation
No. 7
Finish
Bore

9.2" H.E.
Shell



Operation
No. 8
Finish
Turn Body
and Nose
Profile



**9.2" H.E.
Shell**

**Operation
No. 9
Wave Rib
for Copper
Band**

9.2" H.E.
Shell



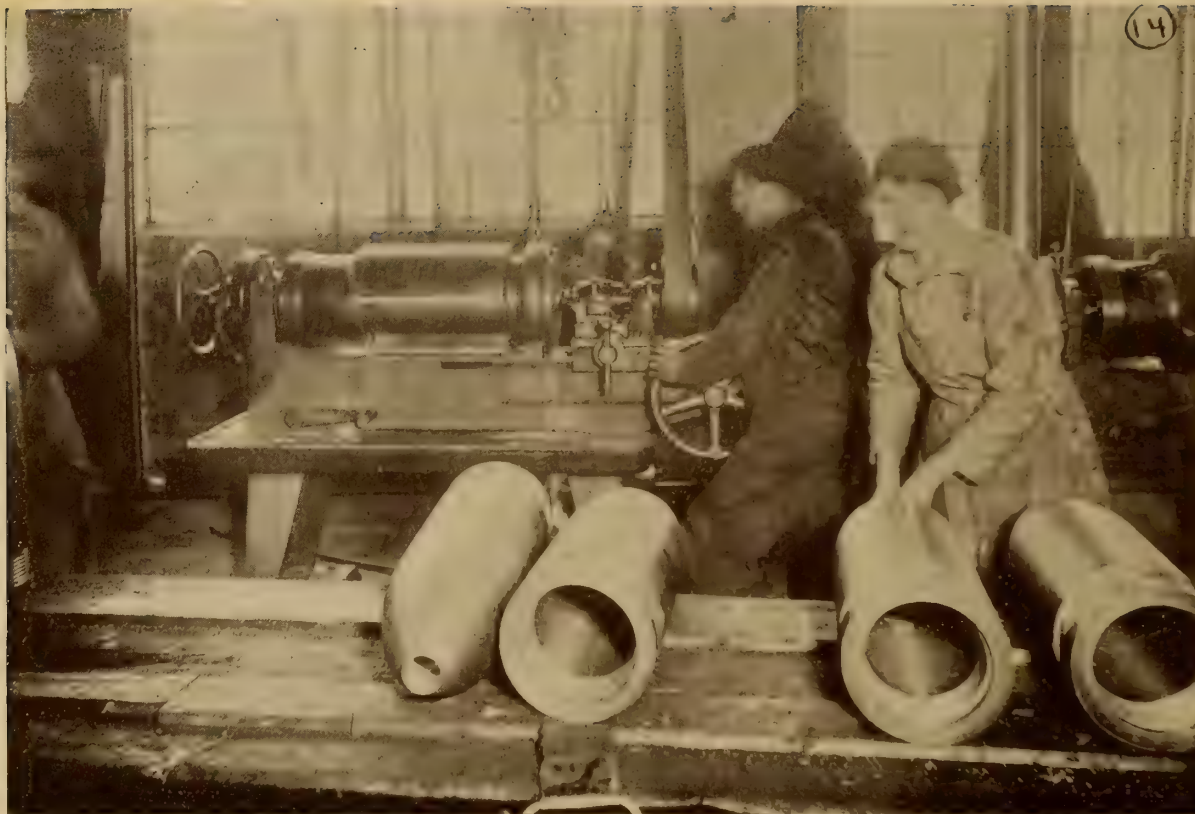
Operation
No. 10
Thread
Mill
Base



9.2" H.E.
Shell

Operation
No. 11
Bore and
Ream
Nose

9.2" H.E.
Shell



Operation
No. 12
Thread
Mill
Nose



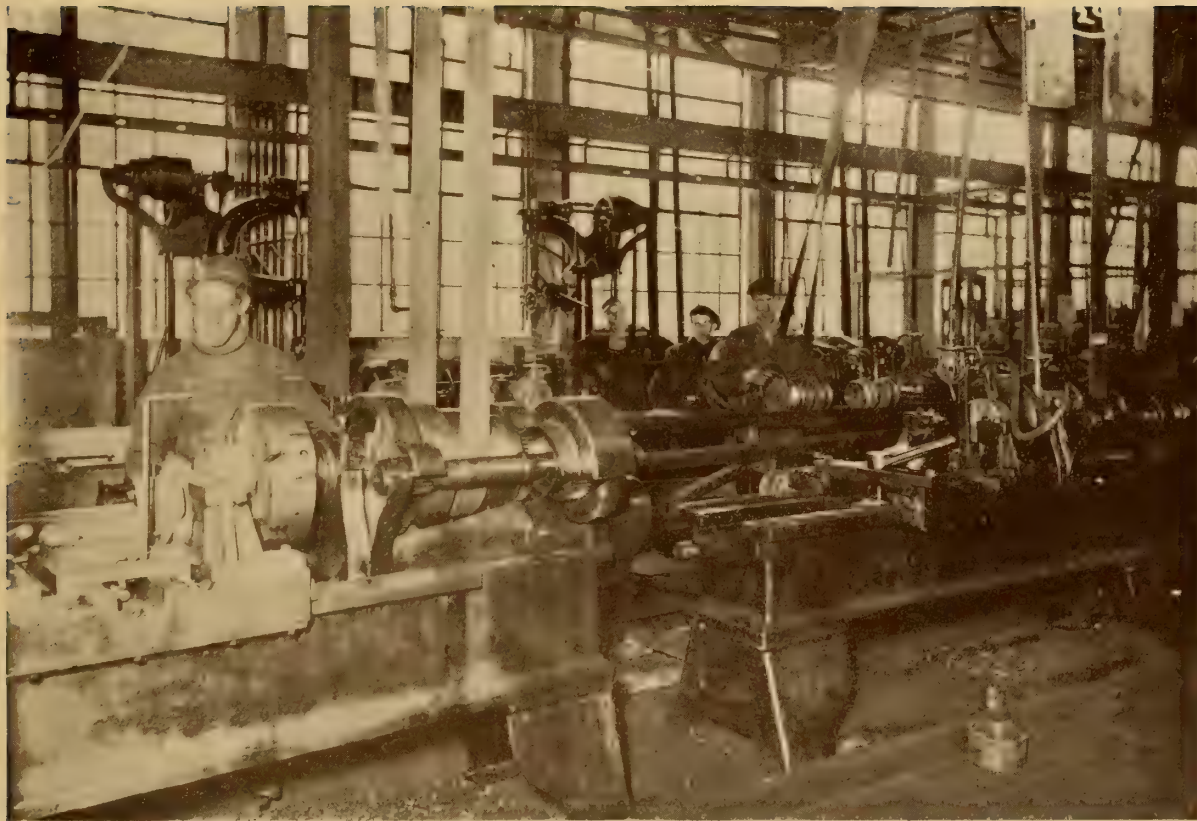
9.2" H.E.
Shell

General
View
Thread
Milling and
Finish
Turning
Section

9.2' H.E.
Shell
Plant



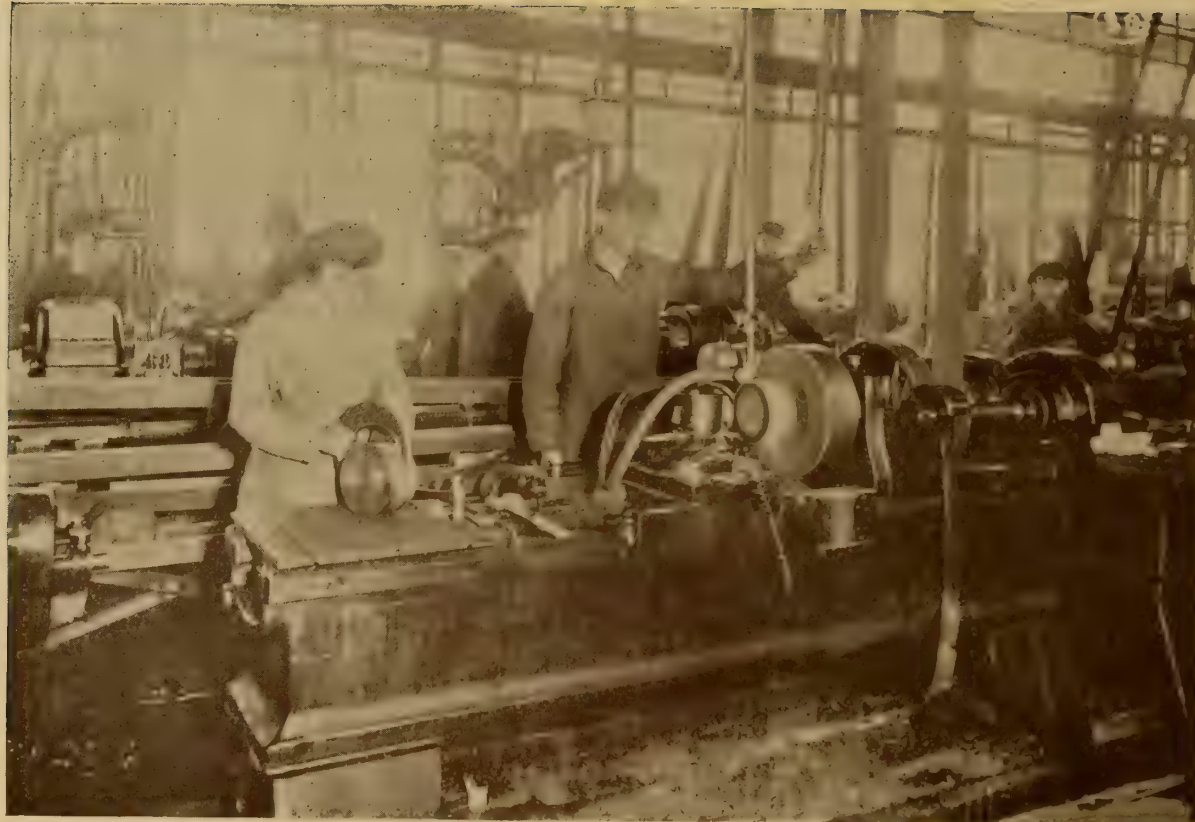
General
View
Base Plug
Section



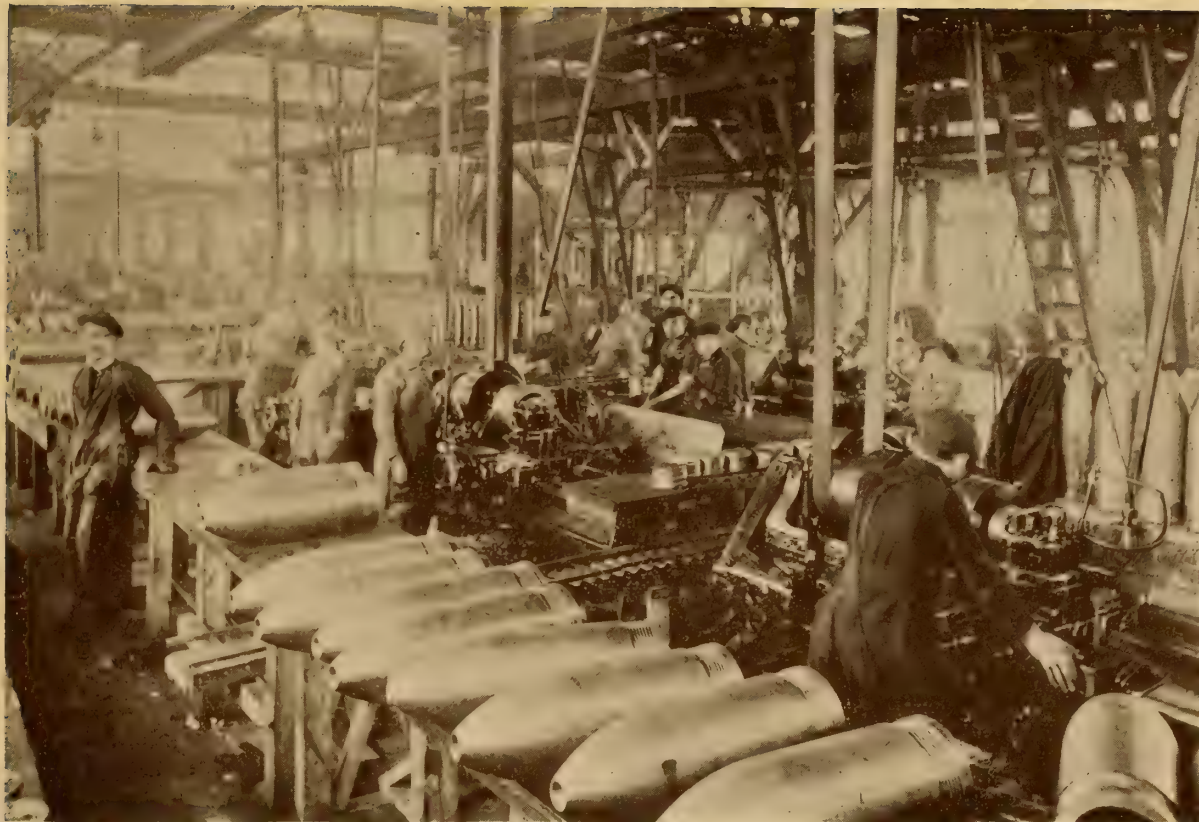
9.2' H.E.
Shell

Base Plug
Operation
No. 1
Turn
Flange
Base Plug

9.2" H.E.
Shell



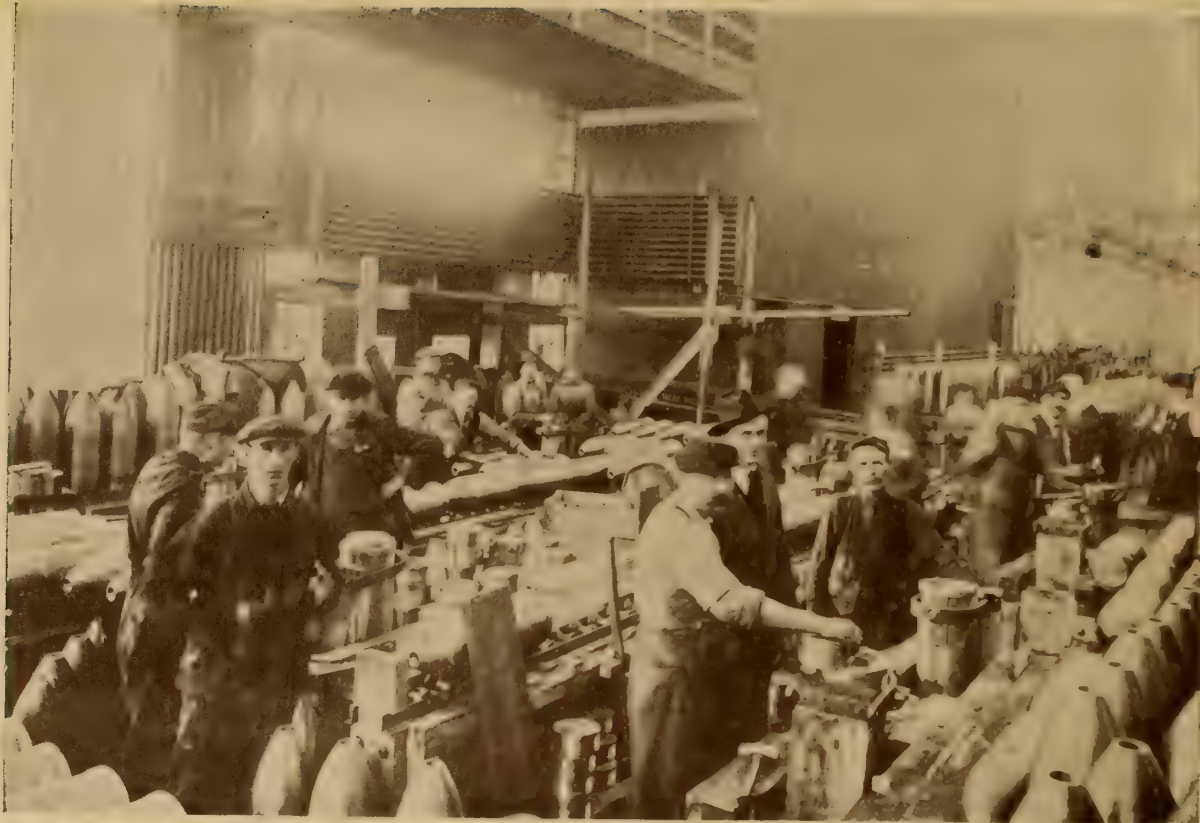
Base Plug
Operation
No. 3
Turn
Base Plug



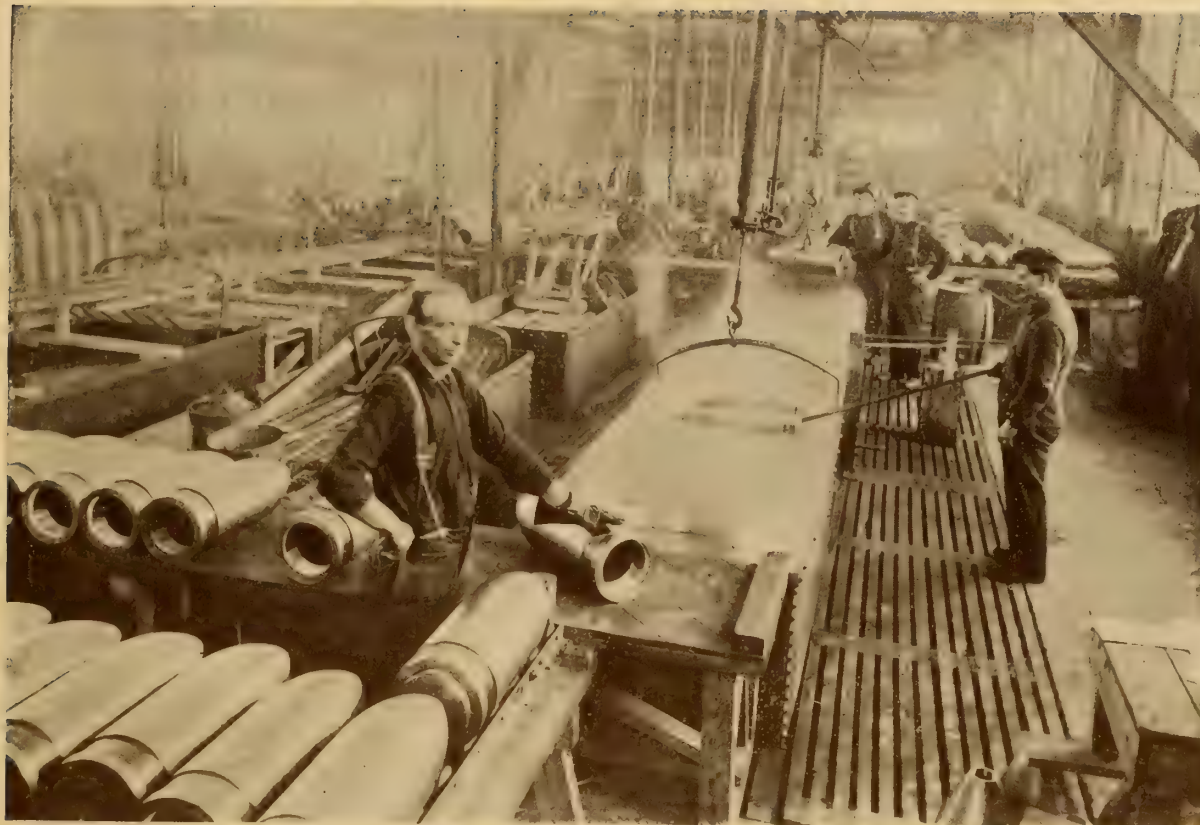
9.2" H.E.
Shell

Base Plug
Operation
No. 8
Finish Face
Base Plug

9.2" H.E.
Shell



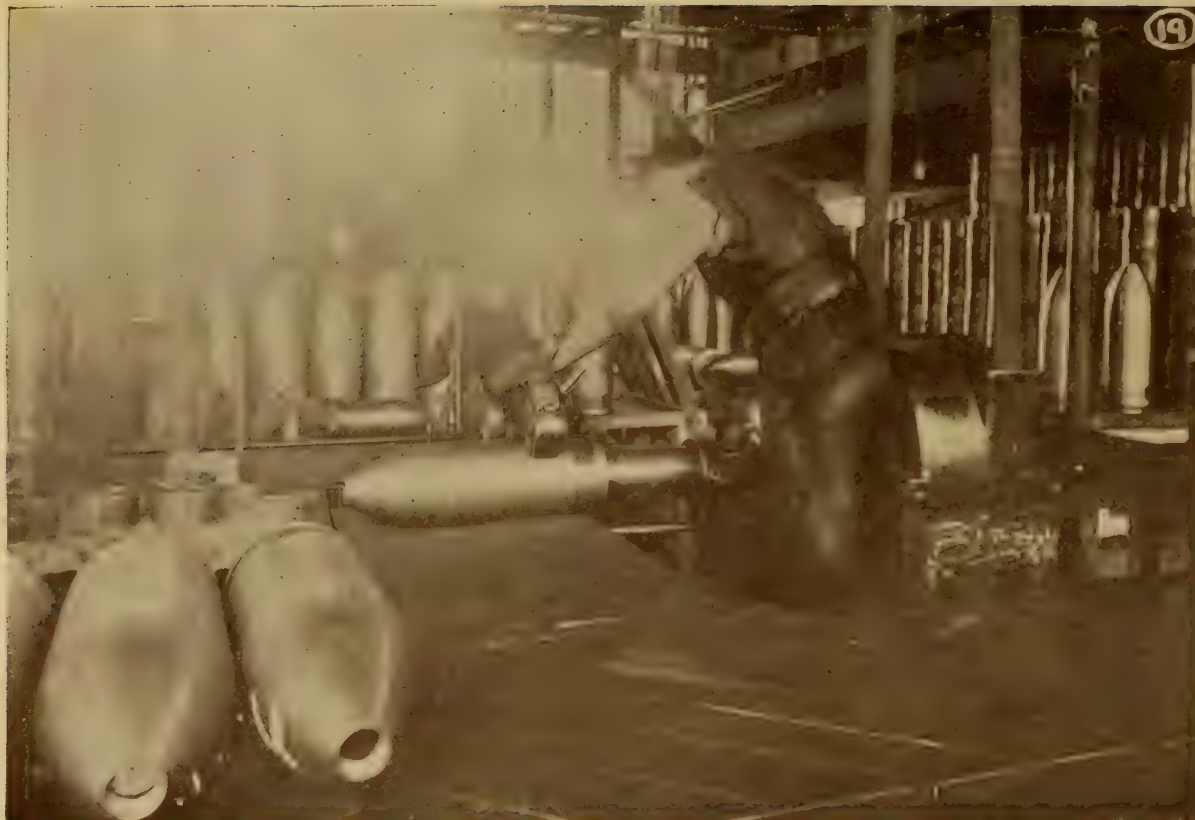
Operation
No. 14
Fit Base
Plug



9.2" H.E.
Shell

Operation
No. 15
Clean and
Wash

9.2 H.E.
Shell



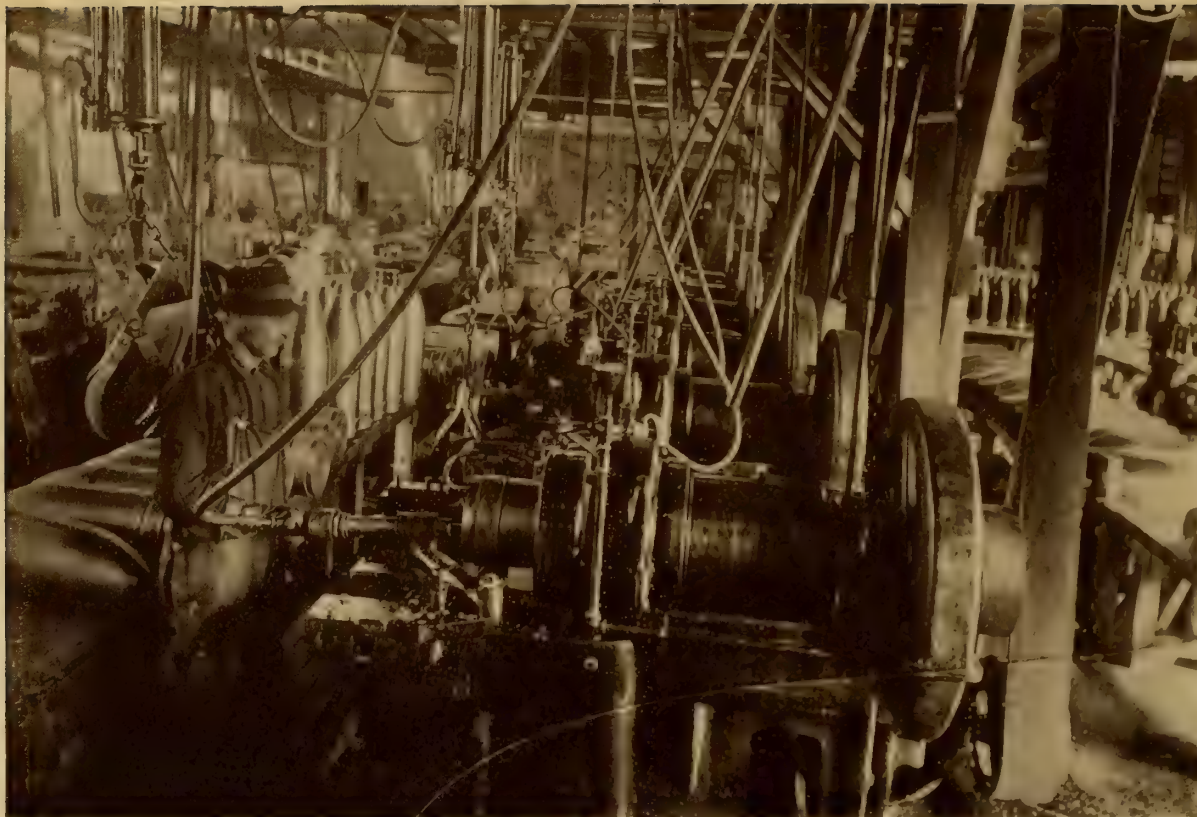
Operation
No. 16
Seal
Base
Plug



9.2' H.E.
Shell

Operation
No. 17
Press
Copper
Band

9.2' H.E.
Shell



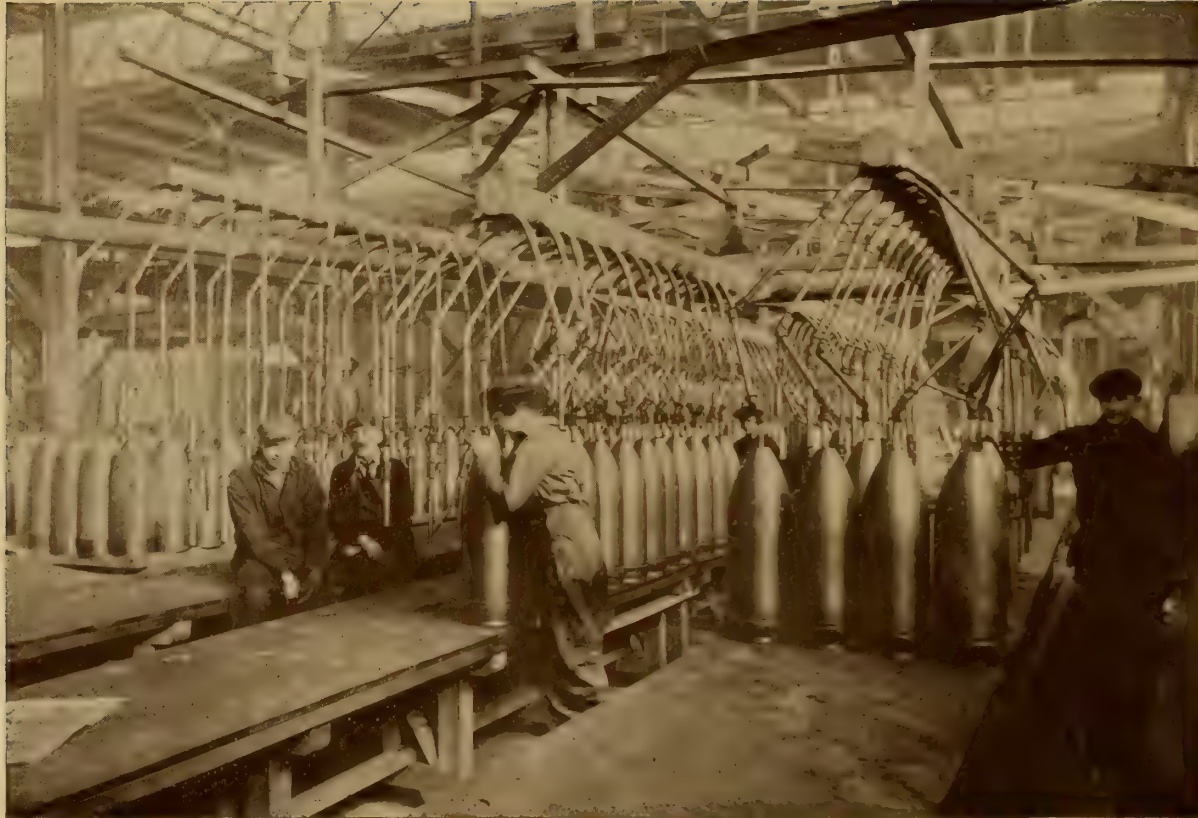
Operation
No. 18
Rivet and
Finish
Face
Base



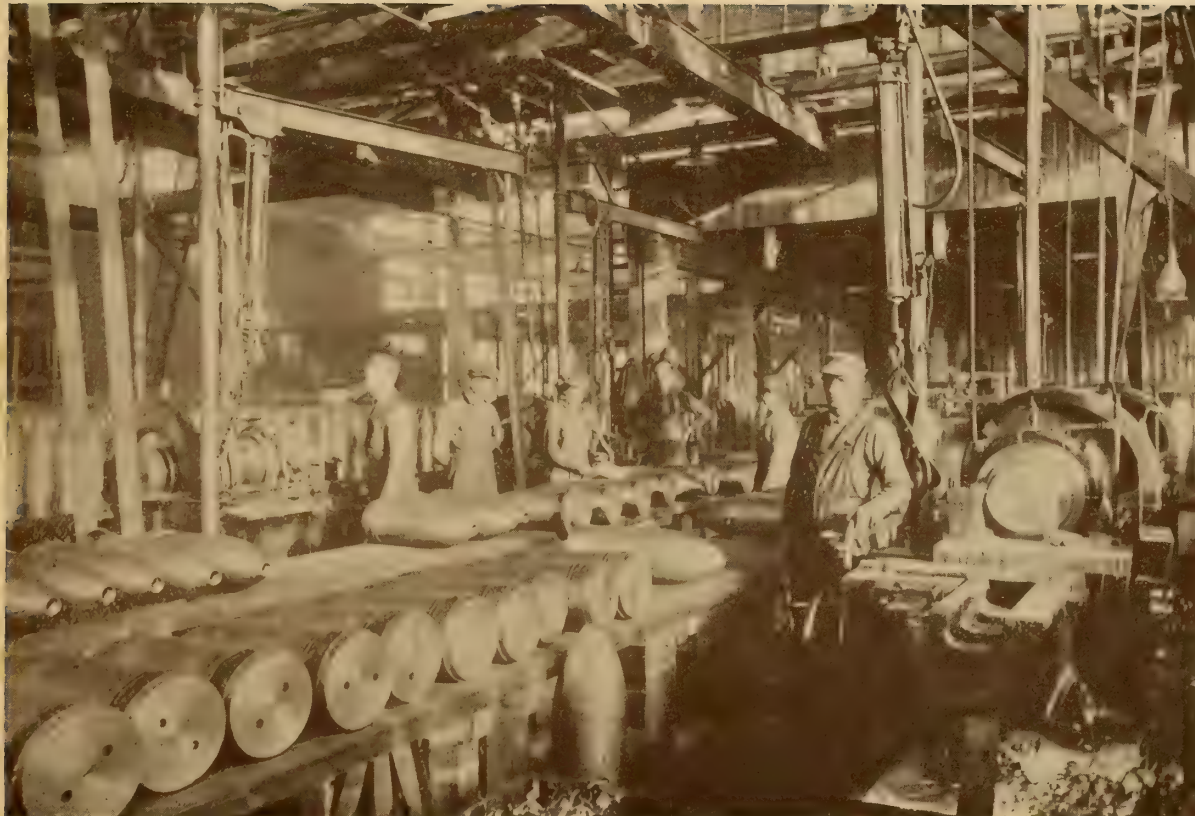
9.2" H.E.
Shell

Operation
No. 19
Varnish
Interior

9.2" H.E.
Shell



Operation
No. 20
Drying
Varnish



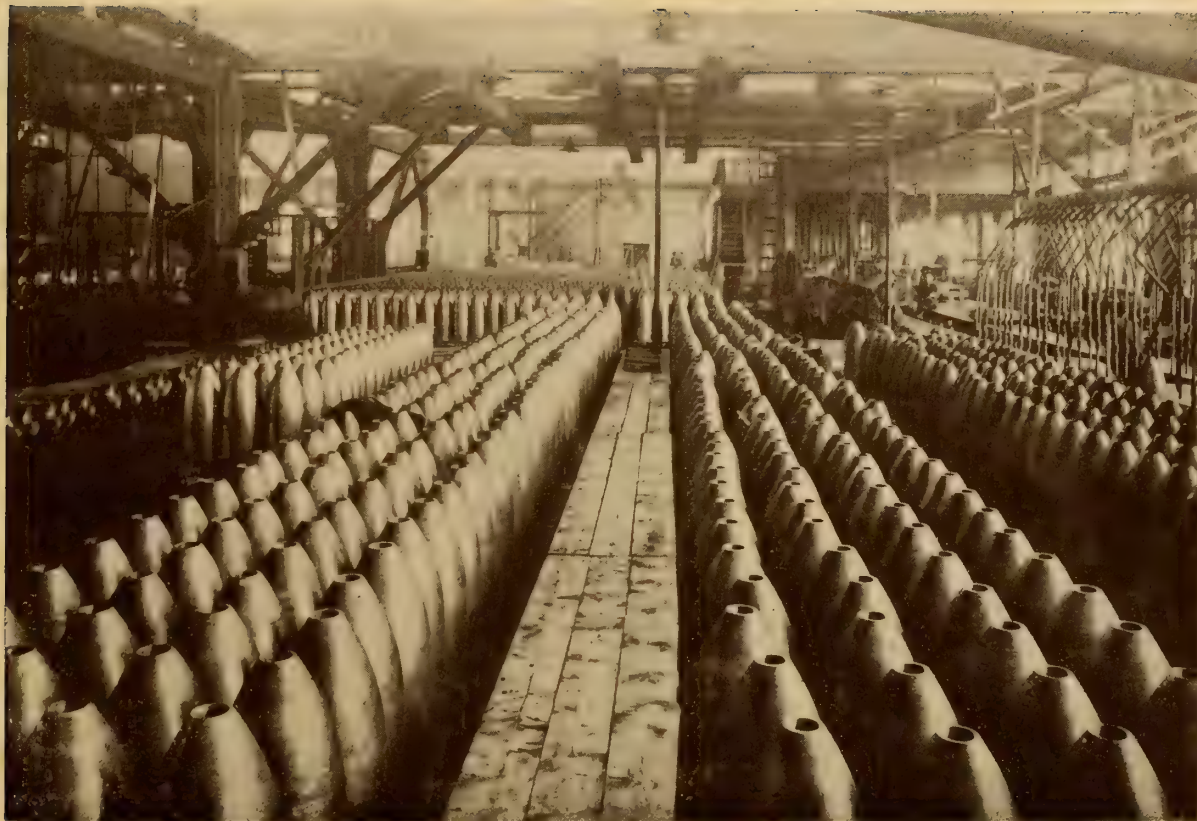
9.2" H.E.
Shell

Operation
No. 21
Finish
Turn
Copper
Band

9.2" H.E.
Shell



Band
Turning
Section



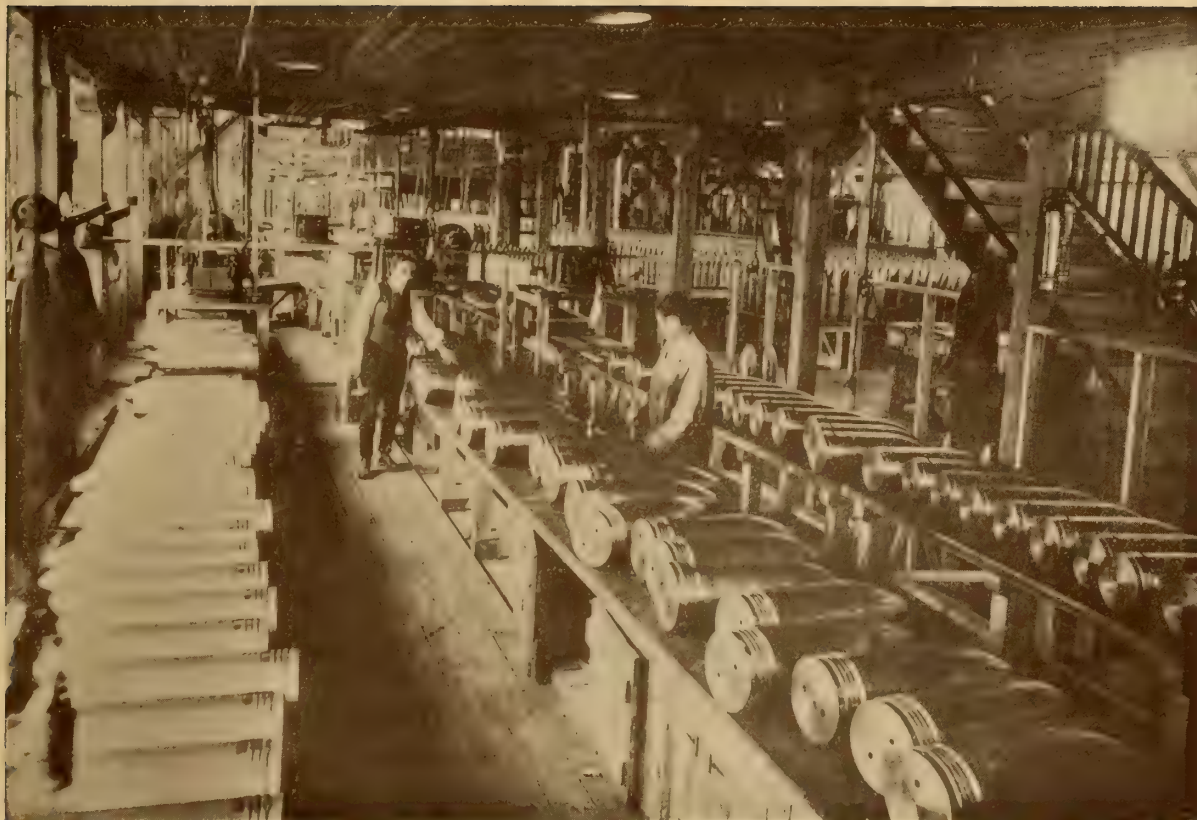
9.2" H.E.
Shell

General
View
Varnish and
Copper
Band
Turning

9.2" H.E.
Shell



U. S.
Government
Preliminary
Inspection



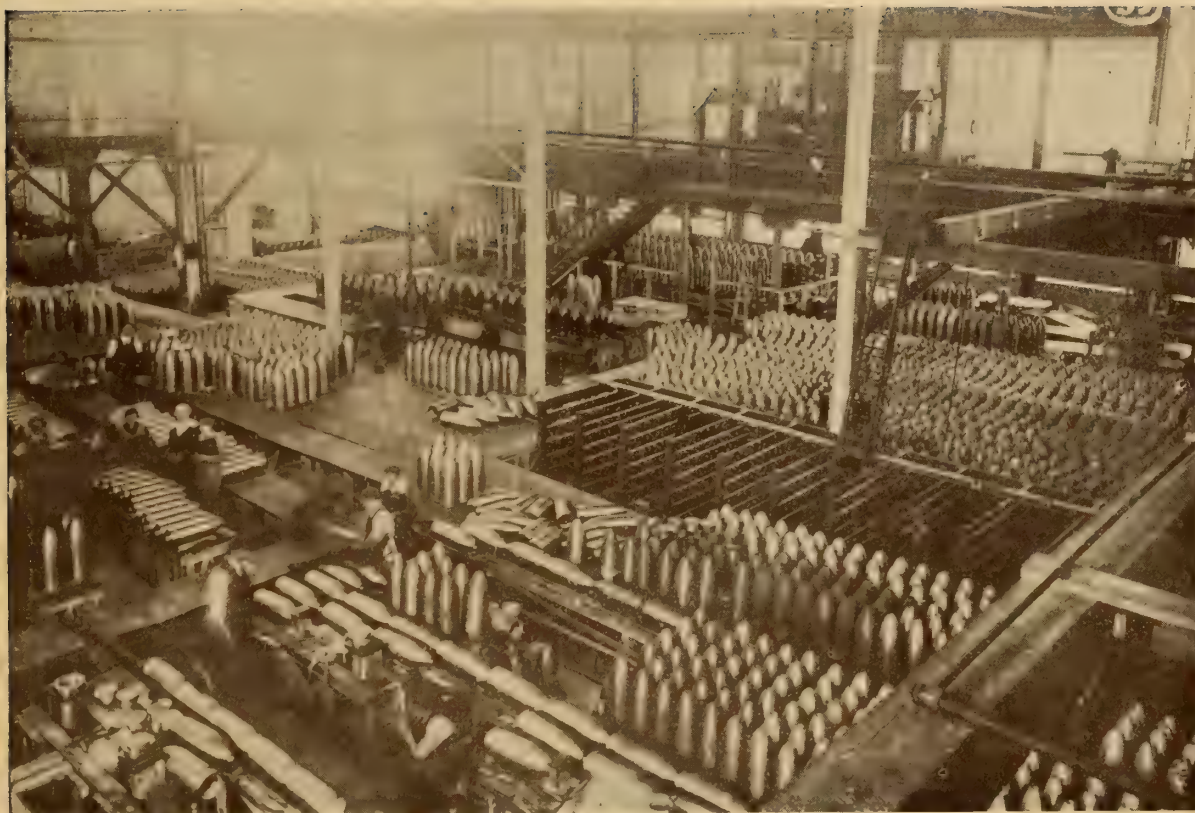
9.2" H.E.
Shell

U. S.
Government
Final
Inspection

9.2' H.E.
Shell



Varnishing
Outside of
Shell for
Shipment



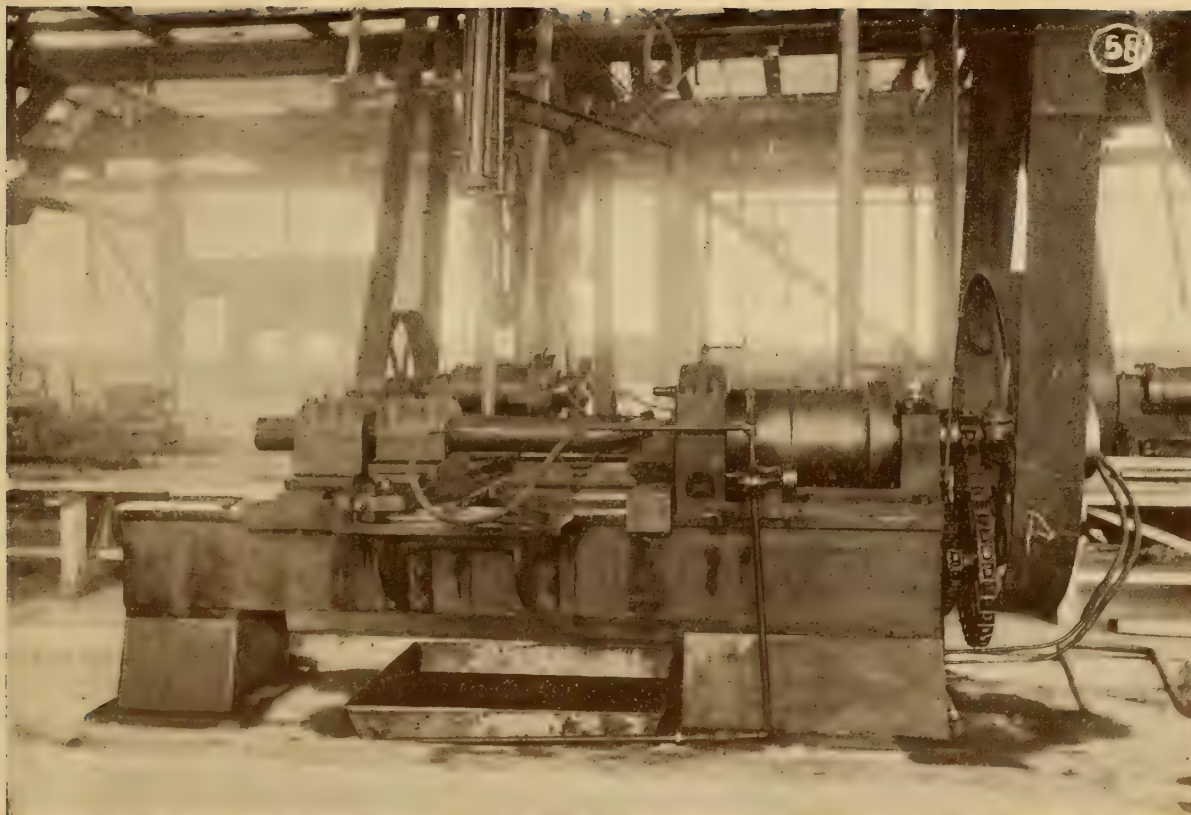
9.2" H.E.
Shell

Genera
View
No. 2
Shop
from
Gallery

9.2" H.E.
Shell



Tool Dept.



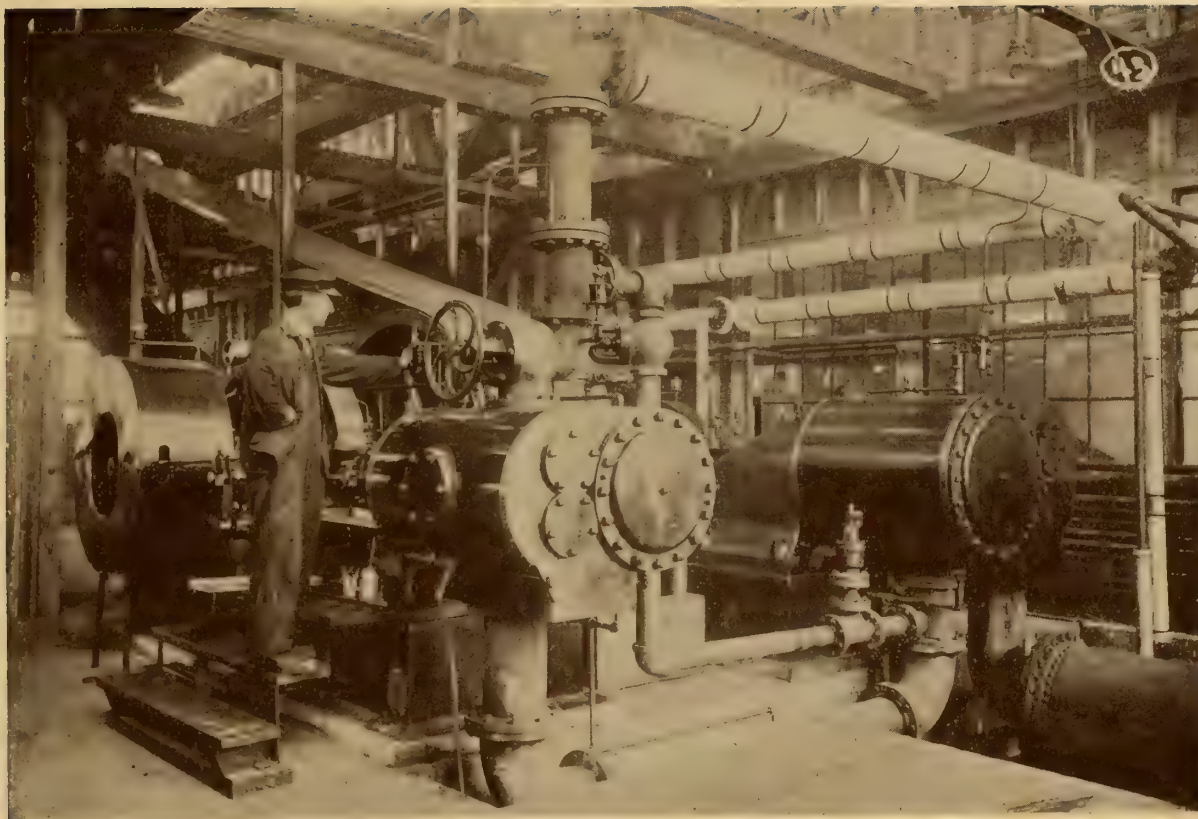
9.2' H.E.
Shell

McAvity
Boring Lathe
Their own
design for
Rough and
Finish Bore
Interior

9.2' H.E.
Shell



Boiler
Room,
No. 1
Power
House



9.2' H.E.
Shell

Engine
No. 2
Power
House

9.2' H.E.
Shell



Women's
Rest
Room



9.2' H.E.
Shell

Cafeteria

9.2" H.E.
Shell



General
Office



9.2' H.E.
Shell

Emergency
Hospital
for First
Aid

9.2" H.E.
Shell



Garage



9.2" H.E.
Shell

Drafting
Department

9.2" H.E.
Shell



Chief
Inspector's
Office



9.2" H.E.
Shell

Machined
Shells
Awaiting
Shipment

4.7" Shell



Sydney
Street

4.7 Plant Officers and Staff



WILLIAM M. FRASER.....	<i>Superintendent</i>
F. L. MILLER.....	<i>Purchasing Agent</i>
WALTER MOWBRAY.....	<i>Chief Draughtsman</i>
JOHN L. SMITH.....	<i>Chief Clerk</i>
E. S. COSSOBOOM.....	<i>Chief Time Keeper</i>

No. 1 Shift

7 A.M. to 6 P.M.

M. C. HANSON, *Asst. Supt.*

M. HAPPENY.....*Foreman of Operations*

J. P. MORAN.....*Foreman of Operations*

T. C. WILCOX.....*Foreman of Operations*

W. H. DOHERTY.....*Foreman of Operations*

J. J. FRASER.. *Foreman of Heat Treatment*.....

F. H. CRAWFORD, *Chief Inspector*

No. 1 Shift

Head Inspector, ROY FERRIS

FREEMAN WENTZELL, *Asst. Supt. Tools and Equipment*

Foreman Millwright.....THOS. A. FRASER

Foreman Electrician.....E. DAREY

Chief Engineer Power.....J. S. ELLIOTT

MRS. ALICE COYLE, *Supervisor of Women Employees*

MRS. JOHN EDGE, *Asst. Supervisor*

No. 2 Shift

6 P.M to 6.30 A.M

B. F. LEWIS, *Asst. Supt.*

H. EVANS

.....W. ROSS

O. J. DICK

.....DAN MORRISON

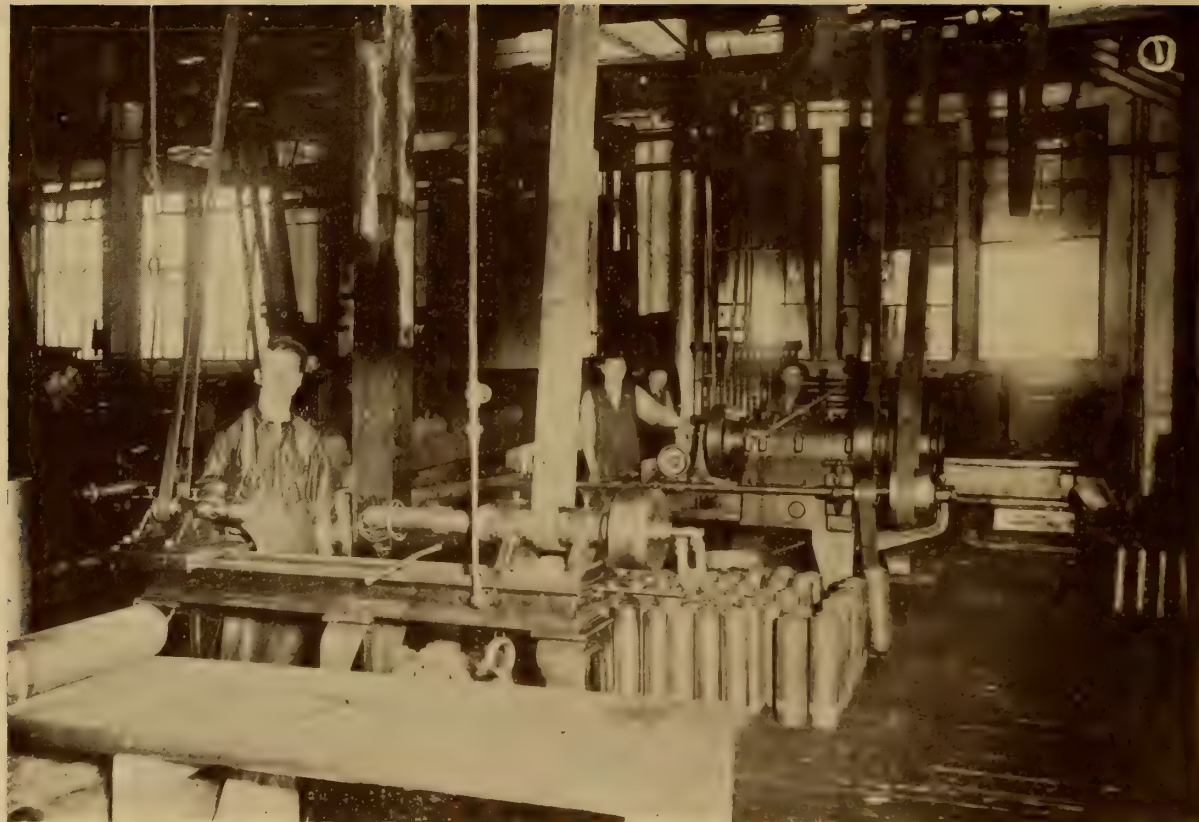
H. FLEWELLING

No. 2 Shift

Head Inspector, J. KELLEHER

MISS STELLA MCCRAE, *Asst. Supervisor*

4.7" H.E.
Shell



Operation
Nos. 1 and 2
Cut off
and Centre
for Rough
Turn



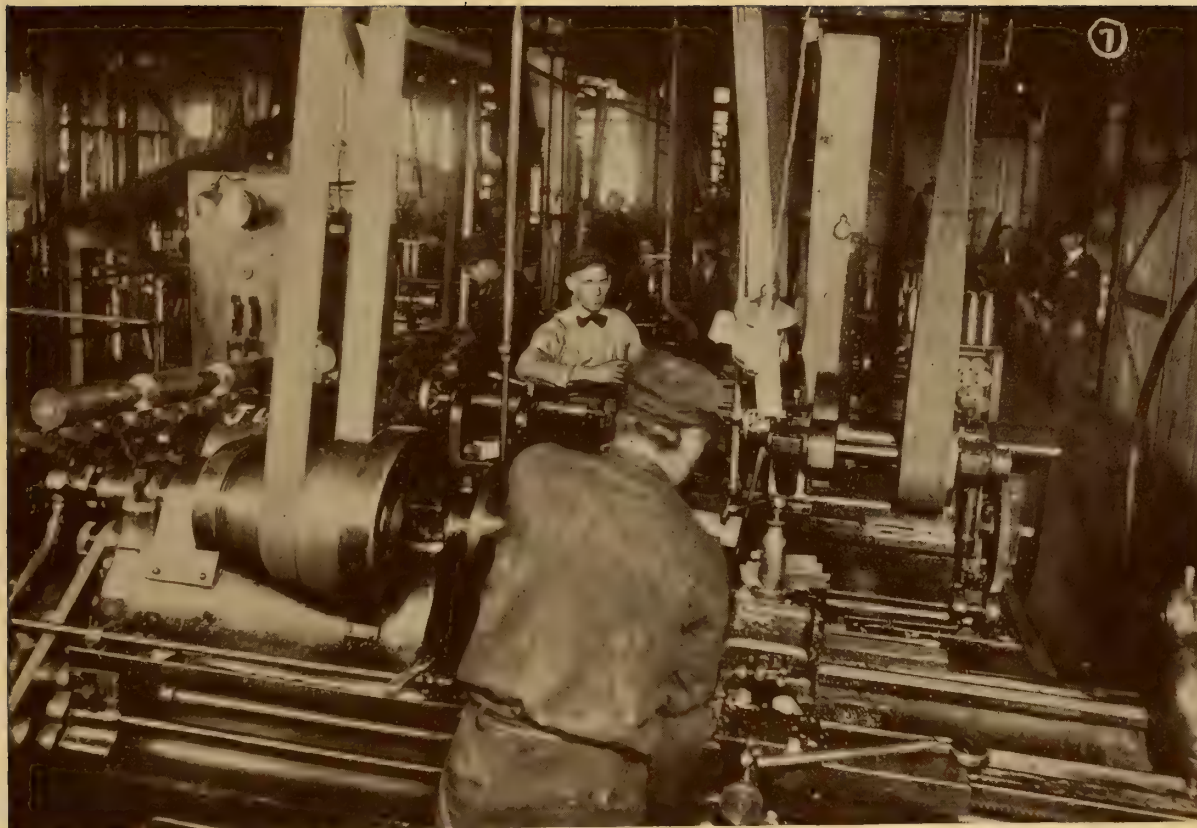
4.7" H.E.
Shell

Operation
No.
Rough
Turn Body

4.7" H.E.
Shell



Operation
No. 6
Rough
Bore
Interior



4.7" H.E.
Shell

Operations
Nos. 9 and 10
Second
Rough
Turn and
True up
Base

4.7" H.E.
Shell



Operation
No. 11
Heat and
Press Nose



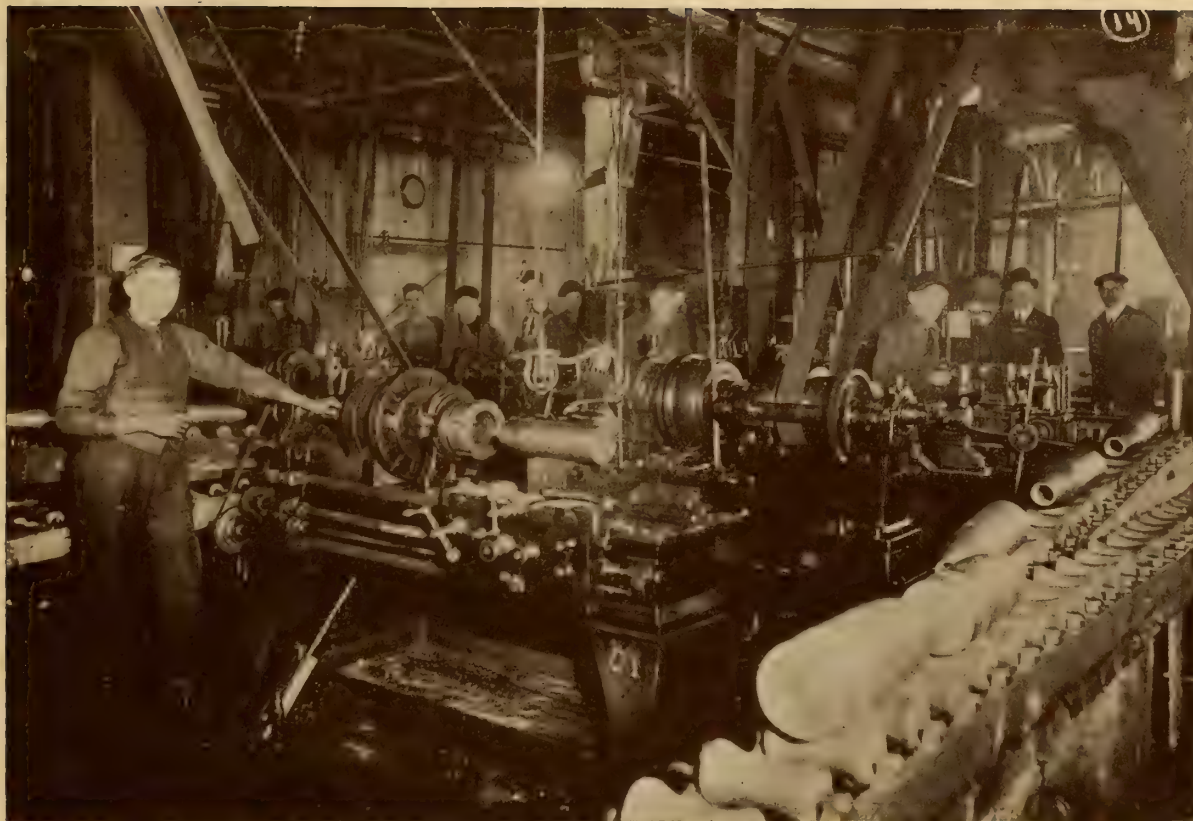
4.7" H.E.
Shell

Operation
No. 12
Heat
Treatment

4.7" H.E.
Shell



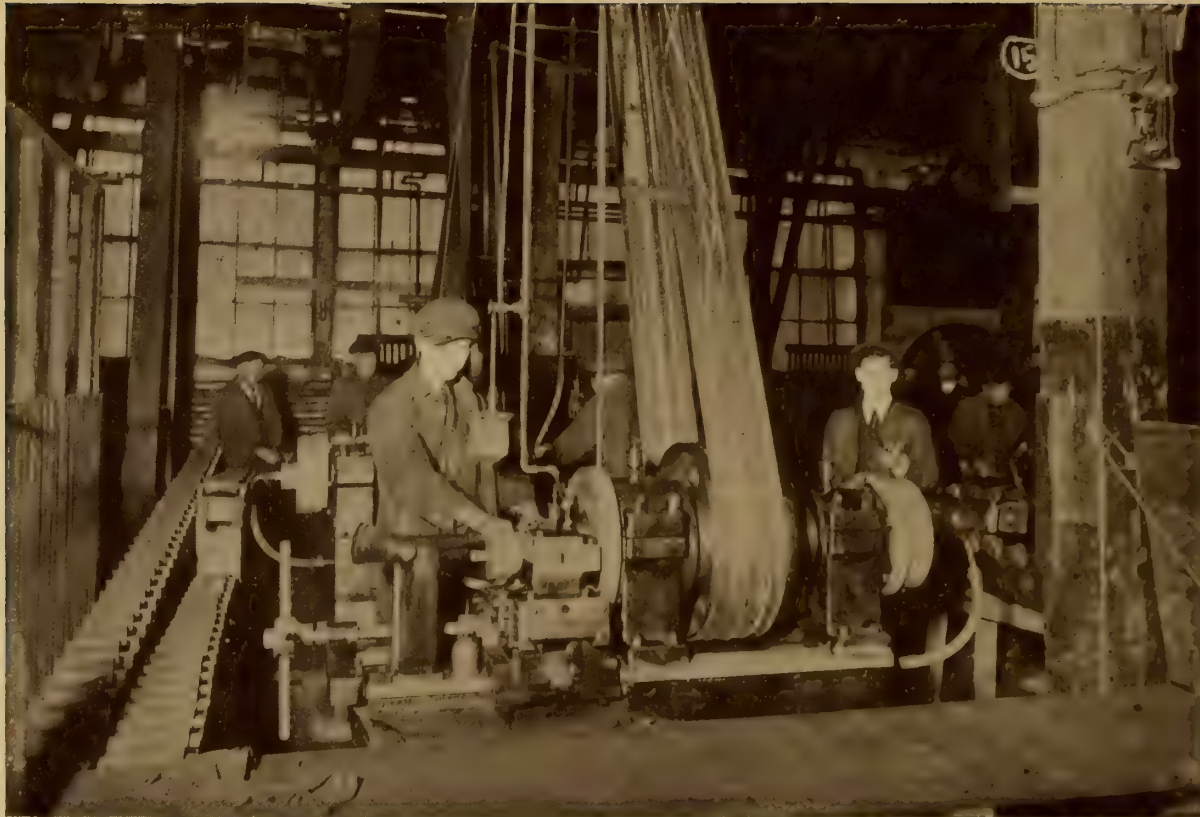
Operation
No. 13
Bore and
Ream
Nose



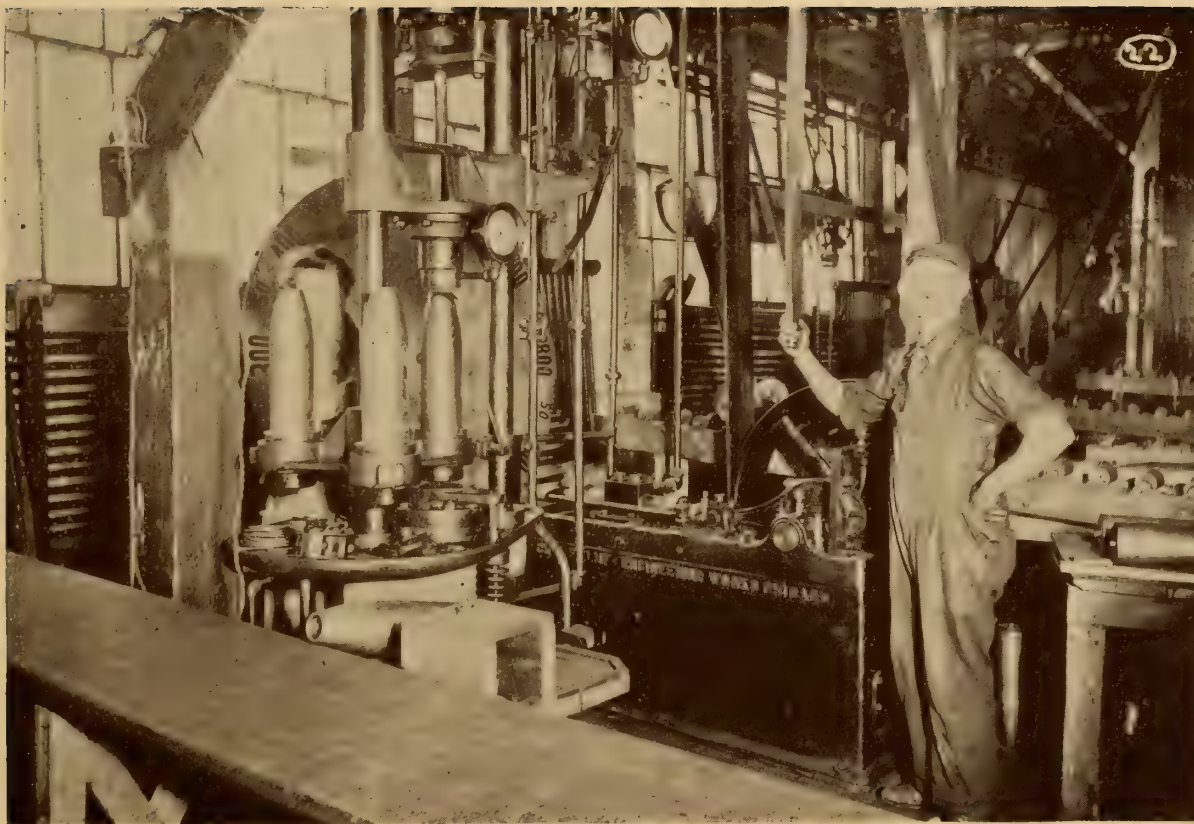
4.7" H.E.
Shell

Operation
No. 16
Face Base
to Weigh

4.7" H.E
Shell



Operations
Nos. 19
and 20
Wave Groove
for Copper
Band and
Grind
Bourlette



4.7" H.E.
Shell

Operation
No. 21
Hydraulic
Testing

4.7" H.E.
Shell



Operation
No. 22
Sand
Blast and
Washing
Interior



4.7" H.E.
Shell

Operation
Nos. 23
and 24
Press Bands
and Base
Plates

4.7" H.E.
Shell



Operation
No. 27
Painting



4.7" H.E.
Shell

Preliminary
Inspection

4.7" H.E.
Shells



Shop
Final
Inspection



4.7" H.E.
Shell

Government
Final
Inspection

4.7" H.E.
Shell



Ladies'
Rest
Room



4.7" H.E.
Shell

Ladies'
Rest
Room



